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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/657,021 | 09/05/2003 | Michael D. Jordan | B03-55 | 9041 |

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EXAMINER

GORDON, RAEANN

ART UNIT PAPER NUMBER

3711

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,021

Applicant(s)

JORDAN, MICHAEL D.

Examiner

Raeann Gorden

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9-5-03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nesbitt (6,394,913) in view of Egashira et al (5,252,652). Regarding claims 1 and 14, Nesbitt discloses a golf ball comprising a core formed from a polybutadiene having a Mooney viscosity from 30 to 70 (col 25, lines 20-26) and an inner cover layer surrounding the core formed from an ionomer having a Shore D hardness of at least 60 (col 7, lines 15, 39). Tables 1 and 2 shows examples with the inner cover hardness of 62 and 63. The inner cover layer may be made from high acid ionomers which are copolymers of ethylene and either acrylic or methacrylic acid (col 7, lines 38-46), low acid ionomers which are copolymers of ethylene and either acrylic or methacrylic acid (col 13, lines 55-61). Nesbitt discloses a second cover layer or outer cover layer surrounding the inner cover layer (col 5, lines 21-24). The outer cover layer has a Shore D hardness from 40 to 55 and may be made from a polyurethane (col 15, line 1, 54-55). Nesbitt further discloses the core may include one or more modifying agents (col 23, lines 59-65). However, a halogenated thiophenol is not disclosed as an option for the core. Egashira discloses a core comprising zinc pentachlorothiophenol.

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Regarding claim 2, the coefficient of restitution (COR) of the ball is at least 0.770 (col 3, line 59). Table 28 shows COR values of 0.795 ± 0.0015 and 0.800 ± 0.015 for the golf ball. Regarding claim 3, Nesbitt discloses the compression of the core is 70 or less (col 23, line 9). Regarding claim 4, the Mooney viscosity of the polybutadiene is preferably from 40 to 65 (col 25, lines 20-26). Regarding claim 5, the core also includes zinc diacrylate (col 23, line 20; table 20). Regarding claim 6, the Shore D hardness of the inner cover is at least 60 (col 7, lines 15, 39). Tables 1 and 2 shows examples with the inner cover hardness of 62 and 63. Regarding claim 7, the inner cover layer may be made from high acid ionomers which are copolymers of ethylene and either acrylic or methacrylic acid (col 7, lines 38-46), low acid ionomers which are copolymers of ethylene and either acrylic or methacrylic acid (col 13, lines 55-61), or thermoset or thermoplastic polyurethanes (col 14, lines 36-45). Regarding claim 8, the core has a diameter from 1.2 to 1.6 inches (col. 28). Regarding claim 9, the outer cover layer has a Shore D hardness from 40 to 55 (col 15, lines 54-55). Regarding claims 10 and 11, the inner cover layer may have a flex modulus greater than 30,000 psi (col. 14, lines 36-44). Regarding claim 12, the inner cover layer has a thickness from 0.01 to 0.10 inch (col 28, lines 66-67). Regarding claim 13, the inner cover layer may have a flex modulus lower than 4,800 psi (see table 3). Regarding claims 15, 17-19, 21, Nesbitt discloses a golf ball comprising a core formed from a polybutadiene having a Mooney viscosity from 30 to 70 (col 25, lines 20-26) and a compression of 70 or less (col 23, line 9). The inner cover layer surrounding the core formed from an acid copolymer having a Shore D hardness less than 60 and flex modulus lower than 4,800 psi (see table 3). The outer

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cover layer has a Shore D hardness from 40 to 55 and may be made from thermoset or thermoplastic polyurethane (col 15, line 1, 54-55). Nesbitt further discloses the core may include one or more modifying agents (col 23, lines 59-65). However, a halogenated thiophenol is not disclosed as an option for the core. Egashira discloses a core comprising zinc pentachlorothiophenol. Regarding claim 16, the inner and outer cover layers have a thickness from 0.01 to 0.10 inch. Regarding claim 20, the spin rate is an obvious feature since the materials are the same. One of ordinary skill in the art would have modified Nesbitt with Egashira to enhance the resilience.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is 703-308-8354. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Raeann Gorden", is written over the printed name.

Raeann Gorden
Examiner
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Rg
March 21, 2004